Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

List of Claims:

1-14. (Cancelled).

15. (Previously Presented) An apparatus, comprising:

a receiver configured to receive beacon frames at beacon intervals, at least some of the beacon frames including an identifier list including identifiers of terminals belonging to an ad-hoc network;

a controller configured to decide, based on the identifier list, whether a wireless terminal is to be selected as a beacon broadcaster in the ad-hoc network; and

a transmitter, responsive to the controller, configured to broadcast beacon frames in the ad-hoc network, the transmitter being configured to insert the identifier list in at least some of the beacon frames broadcast by the wireless terminal.

16. (Previously Presented) The apparatus according to claim 15, wherein the transmitter is configured to send at least one traffic announcement message to another wireless terminal, wherein said at least one traffic announcement message identifies at least one wireless terminal for which the wireless terminal has data to be delivered, and wherein said another wireless terminal is the beacon broadcaster in the ad-hoc network.

17. (Cancelled).

18. (Previously Presented) The apparatus according to claim 15, wherein the transmitter is configured to transmit an identifier of the wireless terminal to another wireless terminal acting as the beacon broadcaster in the ad-hoc network.

19. (Previously Presented) The apparatus according to claim 15, wherein the identifier list includes media access control addresses of the wireless terminals belonging to the ad-hoc network.

20-30. (Cancelled).

31. (Previously Presented) A method comprising:

receiving beacon frames at beacon intervals, at least some of the beacon frames including an identifier list including identifiers of terminals belonging to an ad-hoc network;

deciding, based on the identifier list, whether a wireless terminal is to be selected as a beacon broadcaster in the ad-hoc network;

responsive to the deciding, broadcasting beacon frames in the ad-hoc network; and

inserting the identifier list in at least some of the beacon frames broadcast by the wireless terminal.

32. (Previously Presented) The method according to claim 31, further comprising sending at least one traffic announcement message to another wireless terminal, wherein said at least one traffic announcement message identifies at least one wireless terminal for which the wireless terminal has data to be delivered, and wherein said another wireless terminal is the beacon broadcaster in the ad-hoc network.

33. (Previously Presented) The method according to claim 31, further comprising:

receiving and handling at least one traffic announcement message identifying at least one wireless terminal for which data is to be delivered in the ad-hoc network;

compiling, based on the at least one traffic announcement message, a traffic indication data element; and

inserting the traffic indication data element into a selected subsequent beacon frame.

34. (Previously Presented) The method according to claim 31, further comprising transmitting an identifier of the wireless terminal to another wireless terminal acting as the beacon broadcaster in the ad-hoc network.

35-37. (Cancelled).